

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF MISSOURI
WESTERN DIVISION**

MIDWEST ENERGY EMISSIONS CORP.
(N/K/A BIRCHTECH CORP.),

Plaintiff,

v.

EVERGY, INC., EVERGY METRO, INC.,
EVERGY MISSOURI WEST, INC., and
EVERGY KANSAS CENTRAL, INC.,

Defendants.

CIV. No. 4:25-cv-00050

**COMPLAINT FOR PATENT
INFRINGEMENT**

JURY TRIAL DEMANDED

Plaintiff Midwest Energy Emissions Corp. (n/k/a Birchtech Corp.) (“ME2C”) files this Complaint against Defendants Evergy, Inc., Evergy Metro, Inc., Evergy Missouri West, Inc., and Evergy Kansas Central, Inc. (individually and collectively, “Defendants”) for patent infringement under 35 U.S.C. § 271. ME2C alleges, based on its own personal knowledge with respect to its own actions and based upon information and belief with respect to all others’ actions, as follows:

THE PARTIES

1. Midwest Energy Emissions Corp. is a Delaware corporation with its principal place of business at 1810 Jester Drive, Corsicana, Texas 75109.

2. Defendant Evergy, Inc. (“Evergy”) is a Missouri corporation with a principal place of business at 1200 Main Street, Kansas City, Missouri 64105. Evergy has designated CSC-Lawyers Incorporating Service Company, 221 Bolivar St., Jefferson City, Missouri 65101, as its agent for service of process.

3. Defendant Evergy Metro, Inc. (“Evergy Metro”) is a Missouri corporation with a principal place of business at 1200 Main Street, Kansas City, Missouri 64105. Evergy Metro has designated CSC-Lawyers Incorporating Service Company, 221 Bolivar St., Jefferson City,

Missouri 65101, as its agent for service of process.

4. Defendant Evergy Missouri West, Inc. (“Evergy Missouri West”) is a Delaware corporation with a principal place of business at 1200 Main Street, Kansas City, Missouri 64105. Evergy Metro has designated CSC-Lawyers Incorporating Service Company, 221 Bolivar St., Jefferson City, Missouri 65101, as its agent for service of process.

5. Defendant Evergy Kansas Central, Inc. (“Evergy Kansas Central”) is a Kansas corporation with a place of business at 818 South Kansas Avenue, Topeka, Kansas 66612, and a principal place of business at 1200 Main Street, Kansas City, Missouri 64105. Evergy Kansas Central is registered to do business in the state of Missouri and has designated CSC-Lawyers Incorporating Service Company, 221 Bolivar St., Jefferson City, Missouri 65101, as its agent for service of process.

JURISDICTION AND VENUE

6. This action includes a claim of patent infringement arising under the patent laws of the United States, 35 U.S.C. §§ 1 *et seq.* This Court has jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

7. The Court has general personal jurisdiction over Defendants because each of their affiliations with the State of Missouri are so systematic and continuous as to render each essentially at home in this state. In particular, all Defendants have a principal place of business in Kansas City, Missouri and have the same agent for service of process in Missouri. Furthermore, Evergy and Evergy Metro are incorporated in or organized under the laws of Missouri.

8. The Court also has personal jurisdiction over all Defendants because they have consented to jurisdiction by maintaining registered agents in this state.

9. In addition or in the alternative, this Court has specific personal jurisdiction over Defendants because they have established minimum contacts with this forum such that the exercise

of jurisdiction over Defendants would not offend traditional notions of fair play and substantial justice.

10. Specifically, Defendants Evergy, Evergy Metro, and Evergy Missouri West own and/or operate within this state the coal-fired power plants that commit the acts of infringement alleged below.

11. Defendant Evergy Kansas Central leases and/or operates within this state the La Cygne power plant that commits acts of infringement alleged below.

12. Moreover, Defendant Evergy has induced infringement at power plants and/or exercised control over infringement at power plants in this state by exercising control over its subsidiaries (Evergy Metro, Evergy Missouri West, Evergy Kansas Central, respectively) to intentionally cause infringement in this state.

13. Each of Evergy's subsidiaries relies on employees and administrative services provided by Evergy and its other subsidiaries to operate its coal-fired power plants that commit the acts of infringement alleged below. On information and belief, these employees and services are performed in or by individuals located in this state.

14. In addition or in the alternative, the contacts of Evergy's subsidiaries are attributable to the parent company Evergy, and vice versa. Evergy infringes vicariously by profiting from the direct infringement of their subsidiaries despite having the right and ability to stop that infringement. In addition or in the alternative, Evergy is the alter ego of its subsidiaries, as explained below. In addition or in the alternative, Evergy and its subsidiaries have formed a joint enterprise in the operating of its coal-fired power plants, as explained below.

15. Venue is proper in this district pursuant to 28 U.S.C. § 1400(b) with respect Evergy and Evergy Metro because they each reside in this district.

16. Venue is also proper in this district pursuant to 28 U.S.C. § 1400(b) with respect all Defendants because they have committed acts of infringement and have a regular and established place of business at one or more power plants located within this district. For example, they have performed the patented methods at least at the Iatan Generating Station located in this district.

17. Venue is also proper in this district pursuant to 28 U.S.C. § 1400(b) with respect Evergy, Evergy Metro, Evergy Missouri West, and Evergy Kansas Central because these Defendants have committed acts of infringement and have a regular and established place of business at one or more power plants located within this district. For example, they have performed the patented methods at least at the Hawthorn and La Cygne Generating Stations located in this district.

18. Venue is also proper in this district pursuant to 28 U.S.C. § 1400(b) with respect to Evergy Missouri West based on the fact that Evergy Missouri West is the agent and/or alter ego of Evergy and otherwise acts under the direction and control of Evergy such that performance of the patented methods by Evergy Missouri West are attributable to Evergy. Evergy exercises this control from within this district. In addition or in the alternative, Evergy Missouri West has formed a joint enterprise with Evergy and its other subsidiaries in the operating of its coal-fired power plants such that the acts of infringement in this district performed by Evergy, Evergy Metro, and Evergy Kansas Central are attributable to Missouri West.

19. Venue is also proper in this district pursuant to 28 U.S.C. § 1400(b) with respect to Evergy Kansas Central because it has committed acts of infringement and has a regular and established place of business at one or more power plants or offices located within this forum. Evergy Kansas Central has formed a joint enterprise with Evergy and its other subsidiaries in the

operating of its coal-fired power plants such that the acts of infringement in this district performed by Evergy, Evergy Metro, and Evergy Missouri West are attributable to Evergy Kansas Central. In addition or in the alternative, Evergy is the alter ego of Evergy Kansas Central and vicariously liable with respect to Evergy Kansas Central such that Evergy's acts of infringement in this district are attributable to Evergy Kansas Central. Evergy exercises its control from within this district.

20. All Defendants maintain a regular and established place of business within this district at least at Evergy's principal place of business in Kansas City, Missouri.

21. All Defendants' boards of directors are made up of the same individuals.

22. All Defendants' boards of directors are based in Kansas City, Missouri.

23. Each executive officer of Evergy holds the same position with each of Evergy Kansas Central, Evergy Metro, and Evergy Missouri West.

24. The majority of Defendants' executives, which are shared, are based in Kansas City, Missouri.

25. On information and belief, Evergy Kansas Central and Evergy Missouri West rely on Evergy and Evergy Metro employees working out of facilities located in this district to operate its business, and thus maintain a regular and established place of business in this district.

26. In addition, as explained above, Evergy Kansas Central and Evergy Missouri West rely on shared officers and directors. On information and belief, these individuals have worked in, and work in, facilities in this district. By participating in, inducing, and approving the conduct giving rise to infringement in this case, these individuals' acts of infringement occurred in this district.

27. Specifically, and as noted above, Evergy Kansas Central and Evergy Missouri West rely on the Defendants' shared board members, officers, and employees to operate their respective

business, including the power plants accused of infringement in this case.

28. Evergy Kansas Central, Evergy Metro, and Evergy Missouri West conduct business using the name Evergy. Defendants assess financial performance and allocate resources on a consolidated basis (*i.e.*, operate in one segment).¹

29. Evergy Kansas Central, Evergy Metro and Evergy Missouri West are authorized to participate in the Evergy, Inc. money pool, which is an internal financing arrangement in which funds may be lent on a short-term basis between Evergy Kansas Central, Evergy Metro, Evergy Missouri West and Evergy, Inc. Evergy, Inc. can lend but not borrow under the money pool.²

30. Defendants also provide one another with shared service support, including costs related to human resources, information technology, accounting, and legal services.

31. As Evergy's Form 10-K for 2023 notes:

Employees of Evergy Kansas Central and Evergy Metro manage Evergy Missouri West's business and operate its facilities at cost, including Evergy Missouri West's 18% ownership interest in Evergy Metro's Iatan Nos. 1 and 2. Employees of Evergy Kansas Central manage JEC and operate its facilities at cost, including Evergy Missouri West's 8% ownership interest in JEC. Employees of Evergy Metro manage La Cygne Station and operate its facilities at cost, including Evergy Kansas Central's 50% interest in La Cygne Station.

32. Defendants lease office buildings, computer equipment, vehicles, rail cars, generating plant and other property and equipment, including rail cars to serve jointly-owned generating units where Evergy Kansas Central or Evergy Metro is the managing partner and is reimbursed by other joint-owners for the other owners' proportionate share of the costs.

33. Under the control of Evergy or based on a joint decision, Defendants coordinate their operations and environmental strategies.

¹ Evergy, Inc.'s Form 10-K for 2023, at 7.

² Evergy, Inc.'s Form 10-K for 2023, at 149.

34. For example, Evergy's Form 10-K for 2023 states:

[T]he Evergy Companies [including Defendants] must prudently utilize the generation assets that regulators have allowed the Evergy Companies to include in rates. The Evergy Companies use a triennial integrated resource plan, a detailed analysis that estimates factors that influence the future supply and demand for electricity, to inform the manner in which they supply electricity. The integrated resource plan considers forecasts of future electricity demand, fuel prices, transmission improvements, new generating capacity, cost of environmental compliance, integration of renewables, energy storage, energy efficiency and demand response initiatives.³

....

The Evergy Companies' strategy includes maintaining and continuing reduced operating and maintenance expense levels and planned increases in capital investments. The Evergy Companies' strategy also includes a different mix of capital investments than has been pursued in the past, including significant capital investments in renewable generation. The Evergy Companies' strategy also includes the planned retirement of coal-fired generation resources. If regulators determine that the retirement of coal generation facilities was not prudent, they could prohibit the Energy Companies from recovering, or earning a return on, the investments in those facilities that were prudent when the investments were originally made. This concept is known as a "stranded asset," and generation retirements outside of those contemplated in the integrated resource plan increase the risk that regulators will disallow the recovery of otherwise prudent investments. In addition, the Evergy Companies may in the future utilize legislative mechanisms known as securitization to facilitate the retirement of coal-fired generation, which will eliminate future returns on the investment that was originally made by the Evergy Companies in those coal-fired generating facilities and reduce the Evergy's Companies results of operations and financial position.⁴

ASSERTED PATENTS

35. On July 9, 2019, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 10,343,114 (the "114 patent") entitled "Sorbents for the Oxidation and Removal of Mercury." A copy of the '114 patent is attached as Exhibit A.

36. On March 17, 2020, the United States Patent and Trademark Office duly and legally

³ Evergy, Inc.'s Form 10-K for 2023, at 11.

⁴ Evergy, Inc.'s Form 10-K for 2023, at 21.

issued U.S. Patent No. 10,589,225 (the “’225 patent”) entitled “Sorbents for the Oxidation and Removal of Mercury.” A copy of the ’225 patent is attached as Exhibit B.

37. On March 24, 2020, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 10,596,517 (the “’517 patent”) entitled “Sorbents for the Oxidation and Removal of Mercury.” A copy of the ’517 patent is attached as Exhibit C.

38. On June 2, 2020, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 10,668,430 (the “’430 patent”) entitled “Sorbents for the Oxidation and Removal of Mercury.” A copy of the ’430 patent is attached as Exhibit D.

39. On February 23, 2021, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 10,926,218 (the “’218 patent”) entitled “Sorbents for the Oxidation and Removal of Mercury.” A copy of the ’218 patent is attached as Exhibit E.

40. On March 2, 2021, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 10,933,370 (the “’370 patent”) entitled “Sorbents for the Oxidation and Removal of Mercury.” A copy of the ’370 patent is attached as Exhibit F.

41. ME2C obtained an assignment of the Patents-in-Suit from the Energy & Environmental Research Center at the University of North Dakota (“EERC”) including any rights retained by the EERC to receive past damages. Thus, during the time period of alleged infringement, ME2C held all substantial rights in the patents-in-suit.

FACTUAL ALLEGATIONS

I. The Federal Government Resolves to Regulate Mercury Emissions from Power Plants

42. In 1990, Congress passed the Clean Air Act Amendments of 1990.

43. That law required the U.S. Environmental Protection Agency (“EPA”) to study the impact of various air pollutants, including mercury.

44. To assist in the research, in 1992, the EPA established a National Center for Excellence at the EERC referred to as the Center for Air Toxic Metals (“CATM”).

45. In 1997 and 1998, the EPA issued two reports to Congress: Mercury Study Report to Congress (issued December 1997) and Study of Hazardous Air Pollutant Emissions from Electric Utility Steam (issued February 1998). As an outcome of these studies, the EPA found a pressing need for regulation of mercury pollution from coal-fired power plants. Unfortunately, it also found that no existing technologies were up to the task of significantly reducing the mercury pollution from those plants.

46. In the wake of these reports, various governmental and industry organizations injected millions of dollars into basic scientific research and experimental studies in the search for new mercury capture technologies.

II. The Inventors of the Patents-in-Suit Develop Mercury Capture Solutions

47. Researchers at the EERC were instrumental in developing new techniques for studying this problem and ultimately solving it.

48. In 2002, the EPA surveyed the state of research in this field and produced a follow-up report: Control of Mercury Emissions from Coal-Fired Electric Utility Boilers: Interim Report. This report identified some promising areas of research, and it noted that some technologies were available for reducing mercury emissions. However, the EPA recognized that there was no universal solution to this problem and that more work remained to be done.

49. During this time, the inventors of the patents-in-suit were researching the issue of mercury capture at the EERC. Through their work, they uncovered some of the complex chemistry that occurs in a coal-fired boiler.

50. They further discovered a number of methods for improving mercury capture. In particular, they found that applying a halogen additive such as bromine and bromide compounds

onto coal or into a combustion chamber, when combined with sorbent injection, could dramatically reduce the mercury content of coal-fired power plant emissions.

51. By 2004, the inventors filed a provisional application that would lead to the patents in suit. This application, and the subsequently issued patents, cover some of their discoveries and various applications of their discoveries. In particular, the inventors discovered, and ultimately proved, the benefits of combining halogen treatments (*e.g.*, bromine containing materials) in-flight with backend sorbents (*e.g.*, activated carbon).

52. In 2011, the EPA finalized the first national standards to reduce mercury and other toxic air pollution from coal-fired plants (the Mercury and Air Toxics Standards or “MATS”). Most coal-fired power plants were required to comply with this rule by 2016.

III. Congress Creates the Section 45 Refined Coal Tax Credit

53. While the EPA was working on addressing the issue of mercury emissions, Congress also took action. In 2004, Congress passed the American Jobs Act, which created a new tax credit related to the production of refined coal (referred to as “Section 45 tax credits”).

54. Under this law, a refined coal producer can receive an inflation-adjusted tax credit for each ton (\$/ton) of refined coal sold to a power plant that results in a 40% reduction in mercury emissions and a 20% reduction in NO_x emissions.

55. Because of this highly lucrative law, companies jumped at the chance to collect the tax credits. Indeed, the refined coal tax credit program resulted in companies receiving hundreds of millions of dollars in tax credits each year.

56. The Section 45 tax credit program expired on December 31, 2021, and was not renewed or extended.

IV. ME2C Attempts to Compete in the Market for Mercury Capture Technologies

57. ME2C is the commercial extension of the patented technology.

58. ME2C develops, markets, and sells products and services that practice the patented technology.

59. ME2C's product development efforts have been led by named inventor and Chief Technology Officer John Pavlish. ME2C has developed both sorbent enhancement additives and activated carbon sorbents for practicing the technology described in the patents-in-suit and for practicing other patented methods owned by ME2C.

60. ME2C has also publicized its patent portfolio and explained the scope of the patented technology through its website, its interactions with customers and potential customers, and through presentations at industry events such as the MEGA Symposium, the Energy, Utility & Environment Conference, Lignite Energy Conference, and the Air Quality Conference.

61. ME2C has attempted to compete in the market for mercury capture technologies. In particular it attempted to negotiate supply contracts with coal-fired power plants in anticipation of MATS regulations that became effective in 2015 and 2016, and also periodically afterwards as plants re-evaluate their MATS compliance strategies.

62. However, ME2C was at an unfair disadvantage with respect to the refined coal entities that encouraged power plants to use ME2C's patented technology instead of developing new technologies for refined coal. As proven to the jury in the Delaware case discussed below, refined coal providers have induced power plant operators to infringe the patents-in-suit by offering the technology at no or artificially low costs to the plant.

63. In addition, even after the expiration of the refined coal tax credits, power plants connected to a refined coal facility—which were provided to the plants for free or low cost—can now purchase various materials from different suppliers at low prices and employ them in a manner that infringes ME2C's patents.

64. Despite these difficulties, ME2C has sold its products and services to various power plants throughout the country.

V. ME2C Receives Jury Verdict in its Favor on Refined Coal Producers' Infringement of the Patents-In-Suit

65. In July 2019, ME2C filed a complaint for patent infringement in the United States District Court for the District of Delaware against various entities involved in producing refined coal and coal-fired power plant operators that used ME2C's patented technology, alleging infringement of multiple patents, including four of the Patents-in-Suit (the "Delaware Case").

66. In relevant part, ME2C alleged that the coal-fired power plants at issue directly infringed the asserted patents by (1) burning coal with added halide (*e.g.*, calcium bromide), (2) injecting activated carbon into the flue gas downstream of the power plants' boilers, and (3) using electrostatic precipitators ("ESPs") or baghouses to capture particulate matter, including activated carbon bound to pollutants like mercury in the flue or exhaust.

67. ME2C also alleged that the refined coal entities indirectly infringed the asserted patents by making and selling refined coal, and by inducing power plants that purchased that refined coal to practice ME2C's patented methods without permission in the manner described in the previous paragraph.

68. Before trial, all of the accused power plant operators and most of the accused refined coal entities settled with ME2C and were voluntarily dismissed from the case. The remaining defendants were a group of affiliated refined coal entities, referred to herein as "CERT."

69. On March 1, 2024, following a five-day trial, the jury found CERT liable for contributory and induced infringement of the '517 and '114 Patents, and found that CERT's infringement was willful. Implicit in the jury's finding (and, in fact, required by the jury instructions and controlling law) was a finding that the power plants to which CERT provided

refined coal directly infringed the '517 and '114 patents.

VI. Defendants' Accused Power Plants and Acts of Infringement

70. The Iatan Generating Staton ("Iatan") is a coal-fired power plant in Weston, Missouri.

71. Defendant Evergy Metro owns a majority stake in and operates Iatan.

72. Defendant Evergy Kansas Central also operates Iatan.

73. Defendant Evergy Missouri West owns a minority stake in Iatan.

74. Defendants Evergy Metro, Evergy Kansas Central, and Evergy Missouri West are wholly-owned subsidiaries of Evergy.

75. On information and belief, Evergy Metro, Evergy Kansas Central, and Evergy Missouri West own and/or operate Iatan for the benefit of Evergy. Profits made by Evergy Metro, Evergy Kansas Central, and Evergy Missouri West in connection with Iatan are paid to Evergy.

76. During operation, Iatan burns or has burned and added Br₂, HBr, and/or a bromide compound in the combustion chamber.

77. In addition or in the alternative, Iatan burns or has burned and added iodine, an iodide compound, halogens, and/or a halide in the combustion chamber.

78. During operation, Iatan injects activated carbon sorbent downstream of the combustion chamber.

79. During operation, Iatan employs a baghouse and/or electrostatic precipitator to collect mercury with bromine or another halogen and activated carbon.

80. The Hawthorn Station ("Hawthorn") is a coal-fired power plant in Kansas City, Missouri.

81. Defendant Evergy Metro owns and operates Hawthorn.

82. On information and belief, Evergy Metro owns and operates Hawthorn for the

benefit of Evergy. Profits made by Evergy Metro in connection with Hawthorn are paid to Evergy.

83. During operation, Hawthorn burns or has burned and added Br₂, HBr, and/or a bromide compound in the combustion chamber.

84. In addition or in the alternative, Hawthorn burns or has burned and added iodine, an iodide compound, halogens, and/or a halide in the combustion chamber.

85. During operation, Hawthorn injects activated carbon sorbent downstream of the combustion chamber.

86. During operation, Hawthorn employs a baghouse and/or electrostatic precipitator to collect mercury with bromine and activated carbon.

87. The La Cygne Generating Station (“La Cygne”) is a coal-fired power plant in La Cygne, Kansas.

88. Defendant Evergy Metro owns 50% of and operates La Cygne.

89. Defendant Evergy Kansas Central holds a 50% leasehold interest in La Cygne.

90. On information and belief, Evergy Metro and Evergy Kansas Central own and/or operate La Cygne for the benefit of Evergy. Profits made by Evergy Metro and Evergy Kansas Central in connection with La Cygne are paid to Evergy.

91. During operation, La Cygne burns or has burned and added Br₂, HBr, and/or a bromide compound in the combustion chamber.

92. In addition or in the alternative, La Cygne burns or has burned and added iodine, an iodide compound, halogens, and/or a halide in the combustion chamber.

93. During operation, La Cygne injects activated carbon sorbent downstream of the combustion chamber.

94. During operation, La Cygne employs baghouses and/or electrostatic precipitators

to collect mercury with bromine and activated carbon.

95. The Jeffrey Energy Center (“JEC”) is a coal-fired power plant in St. Mary’s, Kansas.

96. Defendant Evergy Kansas Central owns a majority stake of and operates JEC.

97. Defendant Evergy Missouri West owns a minority share of JEC.

98. On information and belief, Evergy Kansas Central and Evergy Missouri West own and operate JEC for the benefit of Energy. Profits made by Evergy Kansas Central and Evergy Missouri West in connection with JEC are paid to Evergy.

99. During operation, JEC burns or has burned and added Br₂, HBr, and/or a bromide compound in the combustion chamber.

100. In addition or in the alternative, JEC burns or has burned and added iodine, an iodide compound, halogens, and/or a halide in the combustion chamber.

101. During operation, JEC injects activated carbon sorbent downstream of the combustion chamber.

102. During operation, JEC employs a baghouse and/or electrostatic precipitator to collect mercury with bromine and activated carbon.

103. The Lawrence Energy Center (“Lawrence”) is a coal-fired power plant in Lawrence, Kansas.

104. Defendant Evergy Kansas Central owns and operates Lawrence.

105. On information and belief, Evergy Kansas Central owns and operates Lawrence for the benefit of Evergy. Profits made by Evergy Kansas Central in connection with Lawrence are paid to Evergy.

106. During operation, Lawrence burns or has burned and added Br₂, HBr, and/or a bromide compound in the combustion chamber.

107. In addition or in the alternative, Lawrence burns or has burned and added iodine, an iodide compound, halogens, and/or a halide in the combustion chamber.

108. During operation, Lawrence injects activated carbon sorbent downstream of the combustion chamber.

109. During operation, Lawrence employs a baghouse and/or electrostatic precipitator to collect mercury with bromine and activated carbon.

110. Defendants have entered into coal-purchase contracts with various suppliers in Wyoming's Powder River Basin ("PRB"), the nation's principal supply region of low-sulfur coal. PRB coal contains elemental mercury.

111. To comply with MATS, power plants burning this type of coal typically require the use of a bromine-based additive added to the coal or combustion chamber, and injection of activated carbon sorbent injected into the flue gas after combustion. That is, they rely on the use of ME2C's patented technology to meet their MATS regulatory obligations.

112. The "Accused Coal Plants" include at least Iatan, Hawthorn, La Cygne, JEC, Lawrence, and any other coal-fired power plants owned or operated, at least in part, by a Defendant that combusts coal in a combustion chamber with bromine, bromide, iodine, iodide, and/or some other halogen and/or halide that has been added to the coal and/or that has been provided to the combustion chamber, and where they inject a sorbent material comprising activated carbon downstream of the combustion chamber and collect mercury bound to activated carbon in a particulate collection device (*e.g.*, baghouse or ESP).

113. In doing so, the Defendants, by operating and controlling the Accused Coal Plants, perform the methods claimed by the Patents-in-Suit, and thus directly infringe the Patents-in-Suit at the Accused Coal Plants.

114. As the parent and controller of Evergy Metro, Evergy Kansas Central, and Evergy Missouri West, Evergy also induces Evergy Metro, Evergy Kansas Central, and Evergy Missouri West to perform the steps of the patented methods.

115. On information and belief, Evergy does so by exercising control over Evergy Metro, Evergy Kansas Central, and Evergy Missouri West, and providing technical, administrative, logistical and/or financial services to Evergy Metro, Evergy Kansas Central, and Evergy Missouri West.

116. Evergy Metro, Evergy Kansas Central, and Evergy Missouri West are wholly owned subsidiaries of Evergy.

117. As stated above, Evergy Metro, Evergy Kansas Central, and Evergy Missouri West share directors and officers, which are themselves officers and/or directors of Evergy.

118. In light of the above, Evergy Metro, Evergy Kansas Central, and Evergy Missouri West are agents of Evergy.

119. Also in light of the above, and because of its complete domination and control over its subsidiaries, Evergy is the alter ego of Evergy Metro, Evergy Kansas Central, and Evergy Missouri West.

120. Defendants are jointly and severally liable for the acts of infringement committed with respect to coal-fired power plants owned or operated by each individual Defendant.

121. Defendants Evergy and Evergy Metro are jointly and severally liable for the acts of infringement committed with respect to coal-fired power plants owned or operated by Evergy Metro.

122. Defendants Evergy and Evergy Kansas Central are jointly and severally liable for the acts of infringement committed with respect to coal-fired power plants owned or operated by

Evergy Kansas Central.

123. Defendants Evergy Metro and Evergy Kansas Central are jointly and severally liable for the acts of infringement committed with respect to coal-fired power plants they co-own.

124. Defendants Evergy Metro and Evergy Missouri West are jointly and severally liable for the acts of infringement committed with respect to coal-fired power plants they co-own.

125. Defendants Evergy Kansas Central and Evergy Missouri West are jointly and severally liable for the acts of infringement committed with respect to coal-fired power plants they co-own.

126. All Defendants are jointly and severally liable for the acts of infringement committed with respect to coal-fired power plants jointly owned and/or jointly operated by Evergy Metro, Evergy Missouri West, and Evergy Kansas Central.

127. Defendants Evergy, Evergy, Metro, and Evergy Kansas Central directly infringe by performing the methods claimed in each of the patents-in-suit at least at Iatan.

128. Defendants Evergy and Evergy Metro directly infringe by performing the methods claimed in each of the patents-in-suit at least at Hawthorn.

129. Defendants Evergy and Evergy Metro directly infringe by performing the methods claimed in each of the patents-in-suit at least at La Cygne.

130. Defendants Evergy and Evergy Kansas Central directly infringe by performing the methods claimed in each of the patents-in-suit at least at JEC.

131. Defendants Evergy and Evergy Kansas Central directly infringe by performing the methods claimed in each of the patents-in-suit at least at Lawrence.

132. In addition or in the alternative, Defendants Evergy, Evergy Metro, and Evergy Missouri West directly infringe by virtue of their direct or indirect ownership of Iatan and by

delegating performance of the methods claimed in each of the patents-in-suit at Iatan to their operating agents Evergy Metro and Evergy Kansas Central

133. In addition or in the alternative, Defendants Evergy, Evergy Metro, and Evergy Missouri West induce infringement by causing, encouraging, assisting, or otherwise inducing Evergy Metro and/or Evergy Kansas Central to perform the patented methods claimed in each of the patents-in-suit at least at Iatan

134. On information and belief, they do so by enlisting Evergy Metro and/or Evergy Kansas Central as operating agent and by directing and paying Evergy Metro and/or Evergy Kansas Central to perform the patented methods to ensure that Iatan remains in compliance with applicable mercury regulations, and thus remain operational.

135. In addition or in the alternative, Defendant Evergy directly infringes by virtue of its indirect ownership of Hawthorn and by delegating performance of the methods claimed in each of the patents-in-suit at Hawthorn to its operating agent Evergy Metro.

136. In addition or in the alternative, Defendant Evergy induces infringement by causing, encouraging, assisting, or otherwise inducing Evergy Metro to perform the patented methods claimed in each of the patents-in-suit at least at Hawthorn

137. On information and belief, it does so by enlisting Evergy Metro as operating agent and by directing and paying Evergy Metro to perform the patented methods to ensure that Hawthorn remains in compliance with applicable mercury regulations, and thus remain operational.

138. In addition or in the alternative, Defendants Evergy and Evergy Kansas Central directly infringe by virtue of their direct or indirect ownership of La Cygne and by delegating performance of the methods claimed in each of the patents-in-suit at La Cygne to their operating agent Evergy Metro.

139. In addition or in the alternative, Defendants Evergy and Evergy Kansas Central induce infringement by causing, encouraging, assisting, or otherwise inducing Evergy Metro to perform the patented methods claimed in each of the patents-in-suit at least at La Cygne

140. On information and belief, they do so by enlisting Evergy Metro as operating agent and by directing and paying Evergy Metro to perform the patented methods to ensure that La Cygne remains in compliance with applicable mercury regulations, and thus remain operational.

141. In addition or in the alternative, Defendants Evergy and Evergy Missouri West directly infringe by virtue of their direct or indirect ownership of JEC and by delegating performance of the methods claimed in each of the patents-in-suit at JEC to their operating agent Evergy Kansas Central.

142. In addition or in the alternative, Defendants Evergy and Evergy Missouri West induce infringement by causing, encouraging, assisting, or otherwise inducing Evergy Kansas Central to perform the patented methods claimed in each of the patents-in-suit at least at JEC

143. On information and belief, they do so by enlisting Evergy Kansas Central as operating agent and by directing and paying Evergy Kansas Central to perform the patented methods to ensure that JEC remains in compliance with applicable mercury regulations, and thus remain operational.

144. In addition or in the alternative, Defendant Evergy directly infringes by virtue of its direct or indirect ownership of Lawrence and by delegating performance of the methods claimed in each of the patents-in-suit at Lawrence to its operating agent Evergy Kansas Central.

145. In addition or in the alternative, Defendant Evergy induces infringement by causing, encouraging, assisting, or otherwise inducing Evergy Kansas Central to perform the patented methods claimed in each of the patents-in-suit at least at Lawrence

146. On information and belief, it does so by enlisting Evergy Kansas Central as operating agent and by directing and paying Evergy Kansas Central to perform the patented methods to ensure that Lawrence remains in compliance with applicable mercury regulations, and thus remain operational.

147. In addition or in the alternative, Defendants are liable for joint enterprise infringement. Defendants have (1) an agreement, express or implied, to work together to operate coal-fired power plants; (2) a common purpose, *i.e.*, operation of coal-fired power plants, to be carried out by various officers and employees that work for and on behalf of Defendants; (3) a community of pecuniary interest in that purpose, *i.e.*, profits from the ownership or operation of coal-fired power plants and sale of electricity which is paid to these Defendants from customers or as dividends to Evergy; and (4) an equal right to a voice in the direction of the enterprise, which gives an equal right of control, as evidenced based on the shared officers and employees of these Defendants, and common effort to operate the power plants in the Evergy portfolio.

148. The percentage of Defendants' energy supplied by energy source varies from year to year and is subject to numerous operational and economic factors such as planned and unplanned outages, fuel commodity prices, fuel transportation costs, weather, environmental considerations, transmission constraints, and wholesale market prices of electricity. Defendants evaluate these factors continuously in order to facilitate economic dispatch of its generating facilities. When factors for one energy source are less favorable, Defendants place more reliance on other energy sources. For example, Defendants can generate more electricity using low-cost wind-powered generating facilities when factors associated with these facilities are favorable.

149. In addition, Defendants purchase and sell electricity and ancillary services related to generation and load in wholesale markets. They may purchase electricity in the wholesale

markets when it is more economical than generating electricity from its own facilities and may sell surplus electricity in the wholesale markets when it can do so economically. Defendants also enter into financial swap contracts and forward electricity sales and purchases for physical delivery at fixed prices to reduce exposure to electricity price volatility.

150. This conduct has a direct impact on the amount of Defendants' infringement of the patents-in-suit because it can result in increased or decreased generation at the accused power plants, and thus increased or decreased use of the patents-in-suit.

151. In addition, all Defendants operate and conduct business using the name "Evergy."

152. Questions of fact common to all Defendants will arise in this action, including at least facts related to infringement by performing the same infringing methods of the patents at locations where Defendants are jointly and severally liable, facts related to the supply of the same bromine and/or iodine based additives and activated carbon sorbents to multiple power plants at issue in this case, facts related to control of related corporate entities, facts related to ownership and/or operation of jointly owned power plants, and facts related to infringement and validity of the patents.

153. Representatives from ME2C have contacted representatives from Defendants and attempted to negotiate a commercial agreement with respect to Defendants' practicing ME2C's patented processes.

154. Representatives from ME2C contacted representatives from Defendants on August 2, 2016, and attempted to negotiate an agreement with respect to Defendants' practicing ME2C's patented processes. At that time, ME2C sent via email attachment several of its then-issued patents and explained that its technology covered the addition and coupling of a halide/halogen promoter along with a carbon-based sorbent. At that time, Defendants were unwilling to enter into an

agreement with ME2C which would include permission to use ME2C's patented technology.

155. Representatives from ME2C contacted representatives from Defendants on November 1, 2018, and attempted to negotiate an agreement with respect to Defendants' practicing ME2C's patented processes. At that time, ME2C sent a list of its then-issued patents and explained that they covered the process of separating mercury from a mercury-containing gas by using a halogen or halide (*e.g.*, bromine, chlorine, or iodine) on the coal or in the furnace, in conjunction with a sorbent material (*e.g.*, activated carbon) injected upstream of particulate control devices (*e.g.*, ESPs and baghouses). ME2C further explained that it was continuing to prosecute patent applications in these families (families that would eventually include the Patents-in-Suit) and expected to see additional patents issued in the coming months and years. At that time, Defendants were unwilling to enter into an agreement with ME2C which would include permission to use ME2C's patented technology.

156. Representatives from ME2C again contacted representatives from Defendants on August 7, 2019, and attempted to negotiate an agreement with respect to Defendants' practicing ME2C's patented processes. ME2C specifically attached the original complaint in the Delaware case, attached the '114 patent, and explained that the Delaware complaint described the conduct covered by ME2C's patents. At that time, Defendants were unwilling to enter into an agreement with ME2C which would include permission to use ME2C's patented technology.

157. Representatives from ME2C again contacted representatives from Defendants on February 8, 2022, and attempted to negotiate an agreement. ME2C sent several patents to Defendants, including additional Patents-in-Suit, and again explained that ME2C's patents generally covered the use of a halogen-based additive on the coal or in the furnace and a sorbent material (*e.g.*, activated carbon) in the flue gas.

158. In addition, ME2C is one of a small number of companies that provides bromine-containing additives and activated carbon sorbents for mercury control at coal-fired power plants. It is reasonable to infer that Defendants have done at least some due diligence on potential suppliers. During that process, it is likely that they would have discovered the patents-in-suit from the U.S. Patent Office, Google Patents, ME2C publications and product literature, and/or ME2C's website.

159. It is also reasonable to infer that Defendants would have reviewed the prosecution history for the ME2C patents known to Defendants and would be generally aware of other patents in the same family, especially given the fact that ME2C told Defendants it would be continuing to prosecute patents within that family.

160. Defendants are each aware of the Patents-in-Suit and knew or showed willful blindness that their actions would cause infringement.

161. Defendants' infringement has occurred with knowledge of the Patents-in-Suit and has been willful and deliberate since at least that time.

162. Defendants may not avail themselves of 35 U.S.C. § 287 as a defense because ME2C is under no obligation to mark performance of the patented methods.

163. Defendants' acts of infringement have been willful as of the date they became aware of the patented technology and the patents-in-suit, and in any event no later than the filing of this Complaint and/or the date this Complaint was served upon each Defendant.

COUNT ONE: INFRINGEMENT OF THE '114 PATENT

164. ME2C incorporates by reference the preceding paragraphs as if fully set forth herein.

165. U.S. Patent No. 10,343,114 (the "'114 patent"), entitled "Sorbents for the Oxidation and Removal of Mercury", was issued on July 9, 2019, naming Edwin S. Olson, Michael J. Holmes and John H. Pavlish as the inventors. Exhibit A ('114 Patent).

166. ME2C owns all rights, title, and interest in the '114 Patent, and holds all substantial rights pertinent to this suit, including the right to sue and recover for all past, current, and future infringement.

167. The '114 Patent is valid and enforceable and directed to patentable subject matter.

168. Defendants infringe at least one of claims 1-30 of the '114 patent.

169. ME2C provides the following explanation of infringement with regard to an exemplary claim.

170. Claim 25 of the '114 patent recites: "A method of separating mercury from a mercury-containing gas."

171. The Defendants, in operating and controlling the Accused Coal Plants, perform this method in order to comply with federal and/or state mercury regulations.

172. Claim 25 of the '114 patent recites: "combusting coal in a combustion chamber to provide the mercury-containing gas, wherein the coal comprises added Br₂, HBr, a bromide compound, or a combination thereof, added to the coal upstream of the combustion chamber, or the combustion chamber comprises added Br₂, HBr, a bromide compound, or a combination thereof, or a combination thereof."

173. The Defendants, in operating and controlling the Accused Coal Plants, perform this step by burning coal with an added Br₂, HBr, a bromide compound, or a combination thereof and/or by adding Br₂, HBr, a bromide compound, or a combination thereof to the combustion chamber.

174. Claim 25 of the '114 patent recites: "injecting a sorbent material comprising activated carbon into the mercury containing gas downstream of the combustion chamber."

175. The Defendants, in operating and controlling the Accused Coal Plants, perform this step by injecting activated carbon sorbent downstream of the combustion chamber.

176. Claim 25 of the '114 patent recites: “contacting mercury in the mercury-containing gas with the sorbent, to form a mercury/sorbent composition.”

177. The Defendants, in operating and controlling the Accused Coal Plants, perform this step because mercury contained in the gas exiting the combustion chamber contacts the sorbent as all of this material is contained in the same gas.

178. The Defendants, in operating and controlling the Accused Coal Plants, Claim 25 of the '114 patent recites: “separating the mercury/sorbent composition from the mercury-containing gas, to form a cleaned gas.”

179. The Defendants, in operating and controlling the Accused Coal Plants, perform this step using equipment, such as baghouses or electrostatic precipitators, to collect the mercury captured by the sorbent in order to comply with mercury regulations.

180. Defendants have and continue to directly infringe, literally and/or under the doctrine of equivalents, the '114 patent under 35 U.S.C. § 271(a).

181. In addition, Defendant Evergy induces its respective subsidiary Defendants to infringe under 35 U.S.C. § 271(b). Evergy is aware of the '114 patent and knew or showed willful blindness that that its actions would cause infringement. Specifically, it aids or encourages its subsidiaries to infringe by, on information and belief, taking part in the supply contract process for activated carbon and bromine-containing additives at coal-fired power plants that directly infringe and signing, and/or aiding or encouraging their subsidiaries to sign, contracts with suppliers that provide the activated carbon and bromine-containing additives that lead to infringement.

182. In addition, Defendants that own or co-own—but do not operate—an Accused Coal Plant or Plants induce that Accused Coal Plant’s operator or operators under 35 U.S.C. § 271(b). Defendants are aware of the '114 patent and knew or showed willful blindness that that their

actions would cause infringement. Specifically, Defendants that own or co-own—but do not operate—an Accused Coal Plant or Plants cause, encourage, assist, and otherwise induce their respective operating agent Defendant by directing and paying said agent to perform the patented methods to ensure that the Accused Coal Plants remain in compliance with mercury regulations, and thus remain operational.

183. Defendants’ acts of infringement have caused damage to ME2C. ME2C is entitled to recover from Defendants the damages sustained by ME2C as a result of Defendants’ wrongful acts in an amount subject to proof at trial.

184. In addition, the infringing acts and practices of Defendants have caused, are causing, and, unless such acts and practices are enjoined by the Court, will continue to cause immediate and irreparable harm to ME2C for which there is no adequate remedy at law, and for which ME2C is entitled to injunctive relief under 35 U.S.C. § 283.

COUNT TWO: INFRINGEMENT OF THE ’517 PATENT

185. ME2C incorporates by reference the preceding paragraphs as if fully set forth herein.

186. U.S. Patent No. 10,596,517 (the “’517 patent”), entitled “Sorbents for the Oxidation and Removal of Mercury”, was issued on March 24, 2020, naming Edwin S. Olson, Michael J. Holmes and John H. Pavlish as the inventors. Exhibit C (’517 Patent).

187. ME2C owns by assignment all rights, title, and interest in the ’517 Patent, and holds all substantial rights pertinent to this suit, including the right to sue and recover for all past, current, and future infringement.

188. The ’517 Patent is valid and enforceable and directed to patentable subject matter.

189. Defendants infringe at least one of claims 1-30 of the ’517 patent.

190. ME2C provides the following explanation of infringement with regard to an

exemplary claim.

191. Claim 1 of the '517 patent recites: "A method for reducing mercury in a mercury-containing gas."

192. The Defendants, in operating and controlling the Accused Coal Plants, perform this method in order to comply with federal and/or state mercury regulations.

193. Claim 1 of the '517 patent recites: "combusting coal in a combustion chamber, the coal comprising an additive comprising Br₂, HBr, a bromide compound, or a combination thereof, to form the mercury-containing gas."

194. The Defendants, in operating and controlling the Accused Coal Plants, perform this step because they combust coal with an additive comprising Br₂, HBr, a bromide compound, or a combination thereof to form mercury-containing gas.

195. Claim 1 of the '517 patent recites: "collecting mercury in the mercury-containing gas with a sorbent added to the mercury-containing gas, the sorbent comprising activated carbon."

196. The Defendants, in operating and controlling the Accused Coal Plants, perform this step by adding sorbent containing activated carbon to the gas that exits the combustion chamber. The mercury in the gas is then collected by equipment, such as baghouses or electrostatic precipitators.

197. Defendants have and continue to directly infringe, literally and/or under the doctrine of equivalents, the '517 patent under 35 U.S.C. § 271(a).

198. In addition, Defendant Evergy induces its subsidiary Defendants to infringe under 35 U.S.C. § 271(b). Evergy is aware of the '517 patent and knew or showed willful blindness that that its actions would cause infringement. Specifically, it aids or encourages its subsidiaries to infringe by, on information and belief, taking part in the supply contract process for activated

carbon and bromine-containing additives at coal-fired power plants that directly infringe and signing, and/or aiding or encouraging its subsidiaries to sign, contracts with suppliers that provide the activated carbon and bromine-containing additives that lead to infringement.

199. In addition, Defendants that own or co-own—but do not operate—an Accused Coal Plant or Plants induce that Accused Coal Plant’s operator or operators under 35 U.S.C. § 271(b). Defendants are aware of the ’517 patent and knew or showed willful blindness that that their actions would cause infringement. Specifically, Defendants that own or co-own—but do not operate—an Accused Coal Plant or Plants cause, encourage, assist, and otherwise induce their respective operating agent Defendant by directing and paying said agent to perform the patented methods to ensure that the Accused Coal Plants remain in compliance with mercury regulations, and thus remain operational.

200. Defendants’ acts of infringement have caused damage to ME2C. ME2C is entitled to recover from Defendants the damages sustained by ME2C as a result of Defendants’ wrongful acts in an amount subject to proof at trial.

201. In addition, the infringing acts and practices of Defendants have caused, are causing, and, unless such acts and practices are enjoined by the Court, will continue to cause immediate and irreparable harm to ME2C for which there is no adequate remedy at law, and for which ME2C is entitled to injunctive relief under 35 U.S.C. § 283.

COUNT THREE: INFRINGEMENT OF THE ’225 PATENT

202. ME2C incorporates by reference the preceding paragraphs as if fully set forth herein.

203. U.S. Patent No. 10,589,225 (the “’225 patent”), entitled “Sorbents for the Oxidation and Removal of Mercury”, was issued on March 17, 2020, naming Edwin S. Olson, Michael J. Holmes and John H. Pavlish as the inventors. Exhibit B (’225 Patent).

204. ME2C owns by assignment all rights, title, and interest in the '225 Patent, and holds all substantial rights pertinent to this suit, including the right to sue and recover for all past, current, and future infringement.

205. The '225 Patent is valid and enforceable and directed to patentable subject matter.

206. Defendants infringe at least one of claims 1-29 of the '225 patent.

207. ME2C provides the following explanation of infringement with regard to an exemplary claim.

208. Claim 1 of the '225 patent recites: "A method for treating a mercury-containing gas."

209. The Defendants, in operating and controlling the Accused Coal Plants, perform this method in order to comply with federal and/or state mercury regulations.

210. Claim 1 of the '225 patent recites: "combusting a mixture comprising coal, pyrolysis char, and an additive comprising HBr, a bromide compound, or a combination thereof, to form the mercury-containing, gas."

211. The Defendants, in operating and controlling the Accused Coal Plants, perform this step because they combust coal, pyrolysis char, and an additive comprising HBr, a bromide compound, or a combination thereof.

212. Claim 1 of the '225 patent recites: "adding a particulate sorbent material comprising activated carbon into the mercury-containing gas."

213. The Defendants, in operating and controlling the Accused Coal Plants, perform this step by adding sorbent containing activated carbon to the gas that exits the combustion chamber.

214. Defendants have and continue to directly infringe, literally and/or under the doctrine of equivalents, the '225 patent under 35 U.S.C. § 271(a).

215. In addition, Defendant Evergy induces its respective subsidiary Defendants to infringe under 35 U.S.C. § 271(b). Evergy is aware of the '225 patent and knew or showed willful blindness that that its actions would cause infringement. Specifically, it aids or encourages its subsidiaries to infringe by, on information and belief, taking part in the supply contract process for activated carbon and bromine-containing additives at coal-fired power plants that directly infringe and signing, and/or aiding or encouraging their subsidiaries to sign, contracts with suppliers that provide the activated carbon and bromine-containing additives that lead to infringement.

216. In addition, Defendants that own or co-own—but do not operate—an Accused Coal Plant or Plants induce that Accused Coal Plant's operator or operators under 35 U.S.C. § 271(b). Defendants are aware of the '225 patent and knew or showed willful blindness that that their actions would cause infringement. Specifically, Defendants that own or co-own—but do not operate—an Accused Coal Plant or Plants cause, encourage, assist, and otherwise induce their respective operating agent Defendant by directing and paying said agent to perform the patented methods to ensure that the Accused Coal Plants remain in compliance with mercury regulations, and thus remain operational.

217. Defendants' acts of infringement have caused damage to ME2C. ME2C is entitled to recover from Defendants the damages sustained by ME2C as a result of Defendants' wrongful acts in an amount subject to proof at trial.

218. In addition, the infringing acts and practices of Defendants have caused, are causing, and, unless such acts and practices are enjoined by the Court, will continue to cause immediate and irreparable harm to ME2C for which there is no adequate remedy at law, and for which ME2C is entitled to injunctive relief under 35 U.S.C. § 283.

COUNT FOUR: INFRINGEMENT OF THE '430 PATENT

219. ME2C incorporates by reference the preceding paragraphs as if fully set forth

herein.

220. U.S. Patent No. 10,668,430 (the “’430 patent”), entitled “Sorbents for the Oxidation and Removal of Mercury”, was issued on March 24, 2020, naming Edwin S. Olson, Michael J. Holmes and John H. Pavlish as the inventors. Exhibit D (’430 Patent).

221. ME2C owns by assignment all rights, title, and interest in the ’430 Patent, and holds all substantial rights pertinent to this suit, including the right to sue and recover for all past, current, and future infringement.

222. The ’430 Patent is valid and enforceable and directed to patentable subject matter.

223. Defendants infringe at least one of claims 1-29 of the ’430 patent.

224. ME2C provides the following explanation of infringement with regard to an exemplary claim.

225. Claim 1 of the ’430 patent recites: “A method of separating mercury from a mercury-containing gas.”

226. The Defendants, in operating and controlling the Accused Coal Plants, perform this method in order to comply with federal and/or state mercury regulations.

227. Claim 1 of the ’430 patent recites: “combusting coal in a combustion chamber, to provide the mercury-containing gas, wherein the coal comprises an additive comprising Br₂, HBr, a bromide compound, or a combination thereof, wherein the additive is added to the coal before the coal enters the combustion chamber, or the combustion chamber comprises an additive comprising Br₂, HBr, a bromide compound, or a combination thereof or a combination thereof.”

228. The Defendants, in operating and controlling the Accused Coal Plants, perform this step because they combust coal with an additive comprising Br₂, HBr, a bromide compound, or a combination thereof to form mercury-containing gas.

229. Claim 1 of the '430 patent recites: “injecting a sorbent comprising activated carbon into the mercury-containing gas downstream of the combustion chamber.”

230. The Defendants, in operating and controlling the Accused Coal Plants, perform this step by injecting sorbent containing activated carbon downstream of the combustion chamber.

231. Claim 1 of the '430 patent recites: “contacting mercury in the mercury-containing gas with the sorbent.”

232. The Defendants, in operating and controlling the Accused Coal Plants, perform this step because mercury contained in the gas exiting the combustion chamber contacts the sorbent as all of this material is contained in the same gas.

233. Claim 1 of the '430 patent recites: “separating the sorbent contacted with the mercury from the mercury-containing gas.”

234. The Defendants, in operating and controlling the Accused Coal Plants, perform this step using equipment such as baghouses or electrostatic precipitators to collect the mercury captured by the sorbent in order to comply with mercury regulations.

235. Defendants have and continue to directly infringe, literally and/or under the doctrine of equivalents, the '430 patent under 35 U.S.C. § 271(a).

236. In addition, Defendant Evergy induces its respective subsidiary Defendants to infringe under 35 U.S.C. § 271(b). Evergy is aware of the '430 patent and knew or showed willful blindness that its actions would cause infringement. Specifically, it aids or encourages its subsidiaries to infringe by, on information and belief, taking part in the supply contract process for activated carbon and bromine-containing additives at coal-fired power plants that directly infringe and signing, and/or aiding or encouraging their subsidiaries to sign, contracts with suppliers that provide the activated carbon and bromine-containing additives that lead to infringement.

237. In addition, Defendants that own or co-own—but do not operate—an Accused Coal Plant or Plants induce that Accused Coal Plant’s operator or operators under 35 U.S.C. § 271(b). Defendants are aware of the ’430 patent and knew or showed willful blindness that that their actions would cause infringement. Specifically, Defendants that own or co-own—but do not operate—an Accused Coal Plant or Plants cause, encourage, assist, and otherwise induce their respective operating agent Defendant by directing and paying said agent to perform the patented methods to ensure that the Accused Coal Plants remain in compliance with mercury regulations, and thus remain operational.

238. Defendants’ acts of infringement have caused damage to ME2C. ME2C is entitled to recover from Defendants the damages sustained by ME2C as a result of Defendants’ wrongful acts in an amount subject to proof at trial.

239. In addition, the infringing acts and practices of Defendants have caused, are causing, and, unless such acts and practices are enjoined by the Court, will continue to cause immediate and irreparable harm to ME2C for which there is no adequate remedy at law, and for which ME2C is entitled to injunctive relief under 35 U.S.C. § 283.

COUNT FIVE: INFRINGEMENT OF THE ‘370 PATENT

240. ME2C incorporates by reference the preceding paragraphs as if fully set forth herein.

241. U.S. Patent No. 10,933,370 (the “’370 patent”), entitled “Sorbents for the Oxidation and Removal of Mercury”, was issued on March 3, 2021, naming Edwin S. Olson, Michael J. Holmes and John H. Pavlish as the inventors. Exhibit F (’370 Patent).

242. ME2C owns by assignment all rights, title, and interest in the ’370 Patent, and holds all substantial rights pertinent to this suit, including the right to sue and recover for all past, current, and future infringement.

243. The '370 Patent is valid and enforceable and directed to patentable subject matter.

244. Defendants infringe at least one of claims 1-29 of the '370 patent.

245. ME2C provides the following explanation of infringement with regard to an exemplary claim.

246. Claim 1 of the '370 patent recites: "A method for separating mercury from a mercury-containing gas, the method comprising."

247. The Defendants, in operating and controlling the Accused Coal Plants, perform this method in order to comply with federal and/or state mercury regulations.

248. Claim 1 of the '370 patent recites: "combusting a mixture of coal and an additive in a combustion chamber, to form the mercury-containing gas, wherein the additive is chosen from halides, halogens, salts thereof, and combinations thereof."

249. The Defendants, in operating and controlling the Accused Coal Plants, perform this step because they combust coal with an additive comprising halides, halogens, salts thereof, or combinations thereof.

250. Claim 1 of the '370 patent recites: "adding a particulate sorbent material comprising activated carbon into the mercury-containing gas, wherein a weight ratio of the additive added to the coal, added to the combustion chamber, or a combination thereof, to an amount of the sorbent material added to the mercury-containing gas is from about 1:100 to about 30:100."

251. The Defendants, in operating and controlling the Accused Coal Plants, perform this step because they add a particulate sorbent material comprising activated carbon to the mercury-containing flue gas, and the weight ratio of the additive comprising halides, halogens, salts thereof, or combinations thereof to the amount of sorbent is from about 1:100 to about 30:100.

252. Claim 1 of the '370 patent recites: "contacting mercury in the mercury-containing

gas with the sorbent material, to form a mercury-sorbent.”

253. The Defendants, in operating and controlling the Accused Coal Plants, perform this step because mercury contained in the gas exiting the combustion chamber contacts the sorbent as all of this material is contained in the same gas.

254. Claim 1 of the ‘370 patent recites: “separating the mercury-sorbent from the mercury-containing gas.”

255. The Defendants, in operating and controlling the Accused Coal Plants, perform this step using equipment such as baghouses or electrostatic precipitators to collect the mercury captured by the sorbent in order to comply with mercury regulations.

256. Defendants have and continue to directly infringe, literally and/or under the doctrine of equivalents, the ‘370 patent under 35 U.S.C. § 271(a).

257. In addition, Defendant Evergy induces its respective subsidiary Defendants to infringe under 35 U.S.C. § 271(b). Evergy is aware of the ‘370 patent and knew or showed willful blindness that that its actions would cause infringement. Specifically, it aids or encourages its subsidiaries to infringe by, on information and belief, taking part in the supply contract process for activated carbon and halogen-containing additives at coal-fired power plants that directly infringe and signing, and/or aiding or encouraging their subsidiaries to sign, contracts with suppliers that provide the activated carbon and halogen-containing additives that lead to infringement.

258. In addition, Defendants that own or co-own—but do not operate—an Accused Coal Plant or Plants induce that Accused Coal Plant’s operator or operators under 35 U.S.C. § 271(b). Defendants are aware of the ‘370 patent and knew or showed willful blindness that that their actions would cause infringement. Specifically, Defendants that own or co-own—but do not operate—an Accused Coal Plant or Plants cause, encourage, assist, and otherwise induce their

respective operating agent Defendant by directing and paying said agent to perform the patented methods to ensure that the Accused Coal Plants remain in compliance with mercury regulations, and thus remain operational.

259. Defendants' acts of infringement have caused damage to ME2C. ME2C is entitled to recover from Defendants the damages sustained by ME2C as a result of Defendants' wrongful acts in an amount subject to proof at trial.

260. In addition, the infringing acts and practices of Defendants have caused, are causing, and, unless such acts and practices are enjoined by the Court, will continue to cause immediate and irreparable harm to ME2C for which there is no adequate remedy at law, and for which ME2C is entitled to injunctive relief under 35 U.S.C. § 283.

COUNT SIX: INFRINGEMENT OF THE '218 PATENT

261. ME2C incorporates by reference the preceding paragraphs as if fully set forth herein.

262. U.S. Patent No. 10,926,218 (the "'218 patent"), entitled "Sorbents for the Oxidation and Removal of Mercury", was issued on February 23, 2021, naming Edwin S. Olson, Michael J. Holmes and John H. Pavlish as the inventors. Exhibit E ('218 Patent).

263. ME2C owns by assignment all rights, title, and interest in the '218 Patent, and holds all substantial rights pertinent to this suit, including the right to sue and recover for all past, current, and future infringement.

264. The '218 Patent is valid and enforceable and directed to patentable subject matter.

265. Defendants infringe at least one of claims 1-26 of the '218 patent.

266. ME2C provides the following explanation of infringement with regard to an exemplary claim.

267. Claim 1 of the '218 patent recites: "A method of separating mercury from a

mercury-containing gas, the method comprising.”

268. The Defendants, in operating and controlling the Accused Coal Plants, perform this method in order to comply with federal and/or state mercury regulations.

269. Claim 1 of the '218 patent recites: “combusting coal in a combustion chamber, to provide the mercury-containing gas, wherein the coal comprises added HI, an iodide salt, or a combination thereof, added to the coal before the coal enters the combustion chamber, or the combustion chamber comprises added HI, an iodide salt, or a combination thereof, or a combination thereof.”

270. The Defendants, in operating and controlling the Accused Coal Plants, perform this step because they combust coal with an additive comprising HI, an iodide salt, or a combination thereof.

271. Claim 1 of the '218 patent recites: “injecting a sorbent comprising activated carbon into the mercury-containing gas downstream of the combustion chamber, wherein a weight ratio of the HI, iodide salt, or the combination thereof added to the coal, added to the combustion chamber, or a combination thereof, to an amount of the sorbent injected into the mercury-containing gas is from about 1:100 to about 30:100.”

272. The Defendants, in operating and controlling the Accused Coal Plants, perform this step because they add a particulate sorbent material comprising activated carbon to the mercury-containing flue gas, and the weight ratio of the additive comprising HI, iodide salt, or the combination thereof to the amount of sorbent is from about 1:100 to about 30:100.

273. Claim 1 of the '218 patent recites: “contacting mercury in the mercury-containing gas with the sorbent.”

274. The Defendants, in operating and controlling the Accused Coal Plants, perform this

step because mercury contained in the gas exiting the combustion chamber contacts the sorbent as all of this material is contained in the same gas.

275. Claim 1 of the '218 patent recites: “separating the sorbent contacted with the mercury from the mercury-containing gas.”

276. The Defendants, in operating and controlling the Accused Coal Plants, perform this step using equipment such as baghouses or electrostatic precipitators to collect the mercury captured by the sorbent in order to comply with mercury regulations.

277. Defendants have and continue to directly infringe, literally and/or under the doctrine of equivalents, the '218 patent under 35 U.S.C. § 271(a).

278. In addition, Defendant Evergy induces its respective subsidiary Defendants to infringe under 35 U.S.C. § 271(b). Evergy is aware of the '218 patent and knew or showed willful blindness that that its actions would cause infringement. Specifically, it aids or encourages its subsidiaries to infringe by, on information and belief, taking part in the supply contract process for activated carbon and iodine-containing additives at coal-fired power plants that directly infringe and signing, and/or aiding or encouraging their subsidiaries to sign, contracts with suppliers that provide the activated carbon and iodine-containing additives that lead to infringement.

279. In addition, Defendants that own or co-own—but do not operate—an Accused Coal Plant or Plants induce that Accused Coal Plant's operator or operators under 35 U.S.C. § 271(b). Defendants are aware of the '218 patent and knew or showed willful blindness that that their actions would cause infringement. Specifically, Defendants that own or co-own—but do not operate—an Accused Coal Plant or Plants cause, encourage, assist, and otherwise induce their respective operating agent Defendant by directing and paying said agent to perform the patented methods to ensure that the Accused Coal Plants remain in compliance with mercury regulations,

and thus remain operational.

280. Defendants' acts of infringement have caused damage to ME2C. ME2C is entitled to recover from Defendants the damages sustained by ME2C as a result of Defendants' wrongful acts in an amount subject to proof at trial.

281. In addition, the infringing acts and practices of Defendants have caused, are causing, and, unless such acts and practices are enjoined by the Court, will continue to cause immediate and irreparable harm to ME2C for which there is no adequate remedy at law, and for which ME2C is entitled to injunctive relief under 35 U.S.C. § 283.

JURY DEMAND

Plaintiff hereby demands a trial by jury on all issues so triable.

PRAYER FOR RELIEF

WHEREFORE Plaintiff Midwest Energy Emissions Corp. (n/k/a Birchtech Corp.) asks this Court for an order granting the following relief:

- a. A judgment in favor of Plaintiff that Defendants have infringed, either literally and/or under the doctrine of equivalents, the '114, '517, '225, '430, '218, and '370 patents;
- b. A judgment and order finding that Defendants' infringement has been willful;
- c. A preliminary injunction prohibiting Defendants from further acts of infringement;
- d. A permanent injunction prohibiting Defendants from further acts of infringement;
- e. A judgment and order requiring Defendants to pay Plaintiff its damages, costs, expenses, and any enhanced damages to which Plaintiff is entitled for Defendants' infringement;
- f. A judgment and order requiring Defendants to provide an accounting and to pay supplemental damages to Plaintiff, including without limitation, pre-judgment and post-judgment interest;
- g. A judgment and order finding that this is an exceptional case within the meaning

of 35 U.S.C. § 285 and awarding Plaintiff its reasonable attorneys' fees against Defendants; and

h. Any and all other relief as the Court may deem appropriate and just under the circumstances.

DATED: January 23, 2025

Respectfully submitted,

/s/ Anthony G. Simon

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